

Technical Overview

Aluminum Coated High Silica Fabric

High-temperature aluminum coated high silica fabric designed for radiant heat reflection, flame resistance, and thermal protection in extreme industrial environments.

Base material	High silica fiber
Surface treatment	Aluminum-coated heat reflective layer
Construction	Woven silica fabric
Fabric thickness	Customized upon request
Areal weight	Customized upon request
Standard width	Customized upon request
Flame resistance	Inherent
Thermal protection	Radiant and convective heat reflection

Product purpose

Aluminum coated high silica fabric is intended for applications requiring reliable thermal shielding against radiant and convective heat sources. The aluminum-coated surface reflects heat, while the high silica fiber base maintains stability in high-temperature environments.

Thermal performance

The aluminum coating acts as an effective thermal barrier, reducing radiant heat transfer. High silica fibers provide excellent resistance to high temperatures and flame exposure under continuous use.

Mechanical characteristics

The woven fabric construction offers flexibility and conformability, allowing the material to be used in protective garments, heat shields, curtains, and equipment covers.

Typical applications

- Industrial safety apparel and proximity suits
- Heat shields and thermal curtains
- Metal casting and foundry operations
- Glass forming and high-temperature processing
- Industrial firefighting and emergency protection

Handling and fabrication

The fabric can be cut, sewn, or fabricated using standard textile processing methods. Proper fabrication ensures consistent thermal protection and service life.

Limitations

Not designed for direct contact with molten metal without additional protective layers. Not intended as a pressure-containing material. Performance depends on correct selection and installation.

RFQ information

To support accurate material selection and quotation, please provide application details including operating temperature, type of heat exposure, required dimensions, mechanical exposure, and estimated quantity.

Reference product page

https://www.pkfiresleeve.com/aluminum-coated-high-silica-fabric_p107.html

Engineering disclaimer: Performance values may vary depending on application conditions and installation methods.